



National Weather Service

Storm Data and Unusual Weather Phenomena



March 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Number of Persons Injured	Estimated Damage Property	Estimated Damage Crops	Character of Storm
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KENTUCKY, Northeast

KYZ101>103-105

Greenup - Carter - Boyd - Lawrence

01 0000EST
31 2300EST

0 0

Monthly Precipitation

Total monthly precipitation was 7 to 9 inches. Grayson had 9 inches, Ashland and Carter Caves both measured 8.4 inches. Normal March precipitation is 3.5 to 4 inches.

KYZ101>103

Greenup - Carter - Boyd

09 1645EST
1800EST

0 0

35K

High Wind

A strong cold front whipped across northeast Kentucky. A narrow and brief line of showers was associated with the front. Winds gusted into the 45 to 65 mph range. Trees and power lines were blown down.

KYZ101>103-105

Greenup - Carter - Boyd - Lawrence

20 0100EST
21 0100EST

0 0

3M

Flood

Light rain moved into northeast Kentucky during the predawn hours of the 19th. Light to moderate rainfall fell during the 19th, as a warm front tired to lift north from the Tennessee Valley. The heaviest rains occurred from 0100 to 0800E on the 20th, ahead of the low pressure wave on the strong frontal boundary. Rains then diminished during the morning of the 20th. Rain totals from the 30 hour event were 2.5 to 4.5 inches, with roughly 60% of the total occurring in about 6 hours on the 20th. The axis of the heaviest rain was generally along the Interstate 64 corridor, from Olive Hill to Ashland. Rain totals included 4.5 inches from Ashland, 4.3 inches from Carter Caves, 4.2 inches from Grayson, and 3.7 inches from Warnock. Automated gauges showed around 4.3 inches at Cannonsburg of Boyd County. Automated gauges from Potato Knob and Sinking Creek in Carter County indicated 4.1 inches. In Greenup County, Culp Creek measured 3.6 inches, while the Greenup EOC had 3.3 inches. Lawrence County received the lower limit of rain. Charlie reported 2.7 inches of rain.

Widespread small stream, poor drainage, and urban flooding occurred during the morning hours of the 20th. Many people were stranded as roads became flooded. River flooding along the Little Sandy River occurred later in the day.

The office of emergency management director in Carter County said, "it's devastation all over the county." Olive Hill, Norton Branch, and Hitchens were hardest hit. The headwaters of Tygarts Creek flooded at least two-thirds of the city buildings in Olive Hill. The fire station saw almost 2 feet of water inside. Residents called it the highest water since the 1937 flood,. On Norton Branch, a unoccupied mobile home was carried off and became wedged under an old railroad trestle.

The Little Sandy River crested at Grayson around 2300E on the 20th at 29.2 feet. Flood stage is 21 feet.

Preliminary damage assessment indicated 2 mobile homes were destroyed in Carter County. Three single family homes and 2 mobile homes had major damage. One county bridge was destroyed. Damage estimated to public structures, such as roads, were around \$400,000.

In Boyd County, houses and trailers along Shopes Creek were surrounded by water. Rescue workers evacuated families by boat. Flooded basements and streets were widespread in Ashland and Westwood. Preliminary damage assessment in Boyd County indicated 1 single family home and 2 mobile homes were destroyed. Twenty-five single family homes and 4 mobile homes had major damage. Estimates for public assistance, mainly for road damage and debris removal, was on the order of \$250,000.

Most of the water problems in Greenup County were along Tygarts Creek and the Little Sandy River. This affected homes, bridges, and Routes 2, 7 and 1. Tygarts Creek crested at the base of the covered bridge at Bennett's Mill. Repairs to road slippage in Greenup County were estimated at \$400,000. Preliminary damage assessment indicated 2 mobile homes were destroyed in Greenup County. Four single family homes and 5 mobile homes had major damage.

In Lawrence County, precautionary evacuations were along Cat Fork, west of Fallsburg. State officials estimated about \$240,000 damage for bridge repair and debris removal in the county. No homes were affected.

After local emergencies were declared, Governor Patton requested federal assistance from President Bush. On the 4th of April, the 4 northeast Kentucky counties were included in FEMA disaster declaration 1407. This provided both individual and public assistance.



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KENTUCKY, Northeast

OHIO, Southeast

OHZ087

Lawrence

01 0000EST
31 2300EST

0 0

Monthly Precipitation

Total monthly precipitation was 8 to 9 inches across southern portions of the county. South Point had 8.6 inches, more than double the normal value.

OHZ066>067-075>076-083>087

Perry - Morgan - Athens - Washington - Jackson - Vinton - Meigs - Gallia - Lawrence

09 1645EST
1815EST

0 0

75K

High Wind

A strong cold front blew through southeast Ohio. A narrow and brief line of showers was associated with the front. Winds gusted into the 45 to 70 mph range. Numerous trees and power lines were blown down. In Somerset of Perry County, 40 foot trees were snapped in half. Law enforcement in Meigs County reported damage to barns, also a few windows were blown out of buildings.

OHZ085>087

Meigs - Gallia - Lawrence

20 0200EST
1800EST

0 0

750K

Flood

Rains of 4 to 5 inches fell on southern Lawrence County in a 30 hour period on the 19th until after dawn on the 20th. The heaviest rains fell in about a 6 hour period, before dawn on the 20th. The most rain appeared to have fallen along the Ohio River. The storm total at South Point was 4.8 inches. Automated gauges indicated 4.2 inches at Rankin Creek, with 4.0 inches at Kitts Hill and Procterville. Some of the flooded streams included Solida Creek, Charley Creek, Buffalo Creek, Symmes Creek, and Indian Guyan Creek. Urban and poor drainage flooding also occurred. Four people and 2 pets were rescued from the top of their vehicles on Charlie Creek Road in Lawrence County shortly after 0600E. Rain amounts diminished to the north. In northern Lawrence County, Waterloo had 2.9 inches of rain.

Governor Taft declared a state of emergency in Lawrence County. According to the Ohio Emergency Management Agency, four homes were destroyed. On the order of 26 homes sustained major damage in Lawrence County, while another 60 homes had minor damage. Four businesses along Solida Road near South Point sustained water damage.

Rains of 1.5 to 2.5 inches affected Gallia and Meigs Counties. Damage was restricted to roads in Gallia and Meigs Counties.

VIRGINIA, Northwest

VAZ003

Dickenson

17 2300EST
18 0800EST

0 0

250K

Flood

Dickenson County was on the northern fringe of an area of heavy rain that hit Tennessee, southeast Kentucky, and southwest Virginia late on Sunday the 17th and into the early morning hours of Monday the 18th. Rains of 2.5 to 3.5 inches fell over the southern portion of the county in less than 24 hours. An automated rain gauge near Herald measured 3.1 inches, while one gauge near Trammel had 2.8 inches. The cooperative observer at Clintwood had 2.6 inches. Earlier rains, on the 16th into the 17th, helped moisten the ground, prior to this event.

The McClure River and its tributaries flooded roads. On the order of 20 to 30 people were evacuated as a precaution. Most of these evacuations were along Route 83 near Clincho. Some basement flooding occurred. The county emergency director reported one mobile home in Nora received water damage. Two private bridges were also destroyed in the county. State highway crews noted



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Killed	Injured										

VIRGINIA, Northwest

several washed out drain pipes, especially along Route 637.

The county declared a local emergency, followed by a state of emergency by Governor Warner. A few shelters were open. On April 2nd, President Bush included Dickenson County into FEMA disaster declaration 1406. The declaration had a total of 8 Virginia counties for individual assistance.

WEST VIRGINIA, West

WVZ005>006

Wayne - Cabell

01 0000EST
31 2300EST

0 0

Monthly Precipitation

Total monthly precipitation was 7 to 9 inches across Cabell and northern Wayne Counties. The 8.88 inches at the Tri State Airport was their wettest March on record. The community of Wayne had 8.27 inches for the month. Normal March precipitation is 3.5 to 4 inches.

WVZ035>037-046

Raleigh - Fayette - Nicholas - Pocahontas

02 0700EST
1200EST

0 0

Snow

One to 3 inches of snow accumulated on a southeast wind flow, as a storm lifted northeast into the lower Ohio Valley.

**WVZ005>011-013>017-
019>020-026>028-
030>032-036>040**

**Wayne - Cabell - Mason - Jackson - Wood - Pleasants - Tyler - Lincoln - Putnam - Kanawha - Roane - Wirt - Ritchie -
Doddridge - Boone - Clay - Braxton - Lewis - Harrison - Taylor - Fayette - Nicholas - Webster - Upshur - Barbour**

09 1720EST
1955EST

0 0

75K

High Wind (G61)^M

A strong cold front rapidly transversed West Virginia during this Saturday evening. Wind gusts of 45 to 70 mph were associated with a narrow band of showers. Wood County Airport measured a gust to 70 mph at 1812E. The Tri State Airport near Huntington measured a 62 mph gust at 1730E. The Charleston National Weather Service office measured a gust to 51 mph at 1833E. In the wake of the front, winds remained gusty, as temperatures fell quickly from the 60s into the 40s.

A roof to a small church in Huntington was blown off. A sign was blown through a store window in Ravenswood. Numerous trees and power lines were affected in the western counties. Damage became more isolated from the Charleston vicinity and the Interstate 79 corridor on east, into the mountainous counties.

**WVZ005>008-014>018-
028>029-039>040**

Wayne - Cabell - Mason - Jackson - Putnam - Kanawha - Roane - Wirt - Calhoun - Braxton - Gilmer - Upshur - Barbour

20 0330EST
21 0100EST

0 1

480K

Flood

A band of heavy rain, about 30 miles wide, stretched from the Huntington vicinity on northeast, toward Spencer, Burnsville, and Buckhannon. The rain fell in about a 30 hour period from the predawn hours of the 19th to after dawn on the 20th. However, the heaviest rain occurred during a 6 hour period, early on the 20th. Rain totals of 4 to 5 inches fell over the urban area around Kenova, Ceredo, and Huntington. The Huntington Tri State Airport measured 4.8 inches. The cooperative observer in the city of Huntington had 3.6 inches of rain. Further east, Pea Ridge had 2.9 inches of rain. The lock and dam along the Ohio River at Hogsett measured 3.3 inches. Southside of Mason County had 2.75 inches of rain. Spencer saw 2.6 inches of rain. Rains of 1.75 to 2.5 inches were more common in central West Virginia.

Fourpole Creek flooded the Enslow Park section of Huntington. Water surrounded homes and flooded outbuildings, basements, and garages. Only a couple of homes had water in their living area.

In Wayne County, seven homes were flooded along Krauts Creek. A woman and her daughter were rescued from Krauts Creek, when their car was swept into the creek.

In Roane County, homes were flooded in the Alvord and Bell section of Spencer by Spring Creek. About 25 to 30 homes had basements, garages, and outbuildings flooded. Six homes had up to 6 inches of water in their living area. One injury was reported from Roane county, resulting in hospitalization.



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WEST VIRGINIA, West

Along the border region of Jackson, Roane, and Kanawha Counties, the Pocatalico River drainage flooded roads, surrounded homes, and flowed into some basements and outbuildings. This included such small tributaries as Allen Fork, Haines Creek, and Pocatalico Creek near Sissonville. However, water levels in this vicinity, crested much lower than the floods of March, 1997 and June, 1998.

In Putnam County, Little Hurricane Creek flooded roads near Winfield. One van, with its occupant, got stuck in these waters. Cow Creek flooded roads, fields, and some outbuildings.

River flooding occurred later on the 20th along the upper Little Kanawha River, affecting a few homes and businesses. At Glenville, the Little Kanawha River crested near 27 feet around 2300E on the 20th. Flood stage is 23 feet. Grantsville saw a crest just over its 36 foot flood stage. The Tygart Valley River saw minor overflow late on the 20th, affecting roads not dwellings. Philippi saw a crest near 20 feet, while Belington had 15.8 feet.

All total, the West Virginia Office of Emergency Services reported 6 dwellings with major damage and 64 homes with minor damage from this episode. On the order of 10 private bridges were damaged. No federal recovery involvement was expected.